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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/529,443 | 04/13/2000 | KO AOSAKI | KP-8734 | 7076 |
| 466 | 7590 | 04/02/2004 | EXAMINER | |
| YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202 | | | HENN, TIMOTHY J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2612 | 6 |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,443

Applicant(s)

AOSAKI ET AL.

Examiner

Timothy J Henn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-37, 42-45 and 53-58 is/are pending in the application.
- 4a) Of the above claim(s) 30-37, 43-45 and 56-58 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 53 and 54 is/are allowed.
- 6) ☒ Claim(s) 29, 42 and 55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, Species II in Paper No. 4 is acknowledged.
2. Claims 30-37, 43-45 and 56-58 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention/species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 55 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The office notes that claim 55 contains the limitation "an operating section mounted on a back side of said camera body and operated from controlling said optical printer". It is unclear from this limitation what the operating section is actually controlling, and how it is operated. For the purposes of art rejection, this limitation will be read as "an operating section mounted on a back side of the camera body which controls the optical printer".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 55 is rejected under 35 U.S.C. 102(b) as being anticipated by Finelli et al. (US 4,937,676).

[claim 55]

7. In regard to claim 55, note that Finelli et al. discloses an electronic still camera comprising a taking lens mounted on a front side of a box shaped camera body (Figure 2, Item 30), an image sensor for photographing a subject image through the taking lens and outputting an image signal (Figure 3, Item 92; Column 5, Lines 7-13 and Lines 31-49), a memory for storing image data obtained from the image signal through digital conversion (Figure 3, Item 80; Column 5, Line 57 – Column 6, Line 42), an optical printer for exposing an instant film containing a processing solution therein in accordance with image data of one frame read out from the memory (Figure 1, Item 10; Column 3, Lines 18-22; Column 6, Lines 15-64; The office notes that Finelli et al. discloses the use of Polaroid self-developing film which inherently contains processing solution which is used to develop the film), a developing and driving device including developing rollers for developing the processing solution while advancing the instant film after exposure out of the camera body (Figure 3, Item 124; Column 6, Lines 43-64) and an operating section mounted on the back side of the camera body which controls the optical printer (Figure 1, Items 64).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Finelli et al. (US 4,937,676) in view of Shaklee et al. (US 5,373,347).

[claim 29]

10. In regard to claim 29, note that Finelli et al. discloses an electronic still camera comprising an imaging device for obtaining electronic image data from an optical image of a subject (Figure 3, Item 92; Column 5, Lines 7-13 and Lines 31-49), memory means for recording the image data therein (Figure 3, Item 80; Column 5, Line 57 – Column 6, Line 42), a printing head (Figure 3, Item 122); a head driver for driving the printing head on the basis of one frame of image data read out from the memory means in a line sequential fashion to expose the instant film (Figure 3, Item 120; Column 6, Lines 43-64) and a printing device for printing an image on an instant film containing a processing solution therein (Figure 1, Item 10; Column 3, Lines 18-22; Column 6, Lines 15-64; The office notes that Finelli et al. discloses the use of Polaroid self-developing film which inherently contains processing solution which is used to develop the film), the printing device comprising developing rollers for advancing the instant film after exposure out the a camera body while developing the processing solution inside the exposed instant

film (Figure 3, Item 124; Column 6, Lines 43-64). Therefore, it can be seen that Finelli et al. lacks a printing head which is elongated in a main scan direction, a head moving mechanism for moving the printing head in a sub scan direction perpendicular to the main scan direction and a head driver which exposes the instant film line by line while the instant film stands still.

11. Shaklee et al. teaches an optical printer in which elongated print heads (Figure 1, Items 110, 112 and 114) are moved along a stationary media (Column 3, Line 68 – Column 4, Line 3) in a horizontal or vertical direction to project an image onto a media line by line (Column 3, Lines 53-64). The system of Shaklee et al. allows for efficient transfer of wide format images onto photosensitive media (Column 1, Lines 53-63). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an optical printer such as that in Shaklee et al. with the camera of Finelli et al. to efficiently print wide format images.

12. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Finelli et al. (US 4,937,676) in view of Parulski et al. (US 5,828,406) in further view of Hatakeyama et al. (JP 06-189308A).

[claim 42]

13. In regard to claim 42, note that Finelli et al. discloses an electronic still camera comprising an imaging and recording device for obtaining digital image data from an image signal and recording the image data frame by frame in memory means in response to a shutter release signal (Column 5, Lines 5-30; Column 5, Line 57 –

Column 6, Line 42), a display device for displaying a still image on a display panel on the basis of the image data read out from the memory means (Column 6, Lines 32-35), a printing device for printing an image on a photosensitive recording medium by driving a printing head on the basis of image data read out from the memory means (Column 6, Lines 42-64), and a mode selection device for selecting and switching one of the imaging and recording device, the display device and the printing device to an active condition (The office notes that the camera/printer inherently includes modes where the imaging (i.e. CCD) device and recording device (i.e. a memory card) are active and modes where the printing device are active, and that these modes can be switched by the user, see for example Column 7, Lines 3-26) and a display mode where the display device is active, and makes the printing device active and causes the display panel to display a still image from the memory means, and the printing device prints the image that is displayed on the display panel in response to a print execution signal (Column 6, Line 65 - Column 7, Line 26). Therefore, it can be seen that Finelli et al. lacks a display device which displays a real time moving image, a mode selection device which immediately after a power switch is turned on activates the imaging and recording device and a display mode which displays the last picture recorded in the memory means for printing.

14. Parulski et al. discloses a digital camera with a high resolution still mode and a low resolution preview mode (Abstract) which allows the camera to drive a display device at a high rate (Column 7, Lines 3-27) to provide the user with a display of what the image sensor is seeing to allow better framing of the picture to be taken. Therefore,

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a motion preview mode such as the one disclosed in Parulski et al. with the camera/printer of Finelli et al. to provide the user with a motion preview display of what the image sensor is seeing to allow better framing of pictures by the user. It can further be seen that Finelli et al. in view of Parulski et al. lacks a camera which activates an imaging and recording device immediately after a power switch is turned on and a display mode which displays the last picture recorded in the memory means for printing.

15. However, it is well known in the art to set a camera to an image taking mode in which an imaging and recording device are activated immediately after a power switch is turned on to reduce the time delay between powering on the camera and being able to take a picture (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to immediately place the camera/printer of Finelli et al. in view of Parulski et al. in an imaging mode to allow a user to quickly take a picture, even when the camera needs to be turned on first.

16. Hatakeyama et al. discloses a camera in which a picture is taken and then displayed on a video monitor to allow the user to determine whether or not the picture is to be printed, or if another picture should be taken (Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the picture review system of Hatakeyama et al. with the camera/printer of Finelli et al. in view of Parulski et al. to allow a user to verify that the picture which has been taken is desirable to print.

Allowable Subject Matter

17. Claims 53 and 54 are allowed.

[claim 53 and 54]

18. In regard to claims 53 and 54, note that the prior art does not teach or fairly suggest an electronic still camera comprising a pack loading chamber in which a print head moving mechanism and a developing and driving mechanism are located on opposite sides of the pack loading chamber.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art further shows the current state of the art in digital cameras with optical printers.

| | | |
|------|----------------|--------------|
| i. | Agulnek et al. | US 4,525,729 |
| ii. | Stephenson | US 5,802,413 |
| iii. | Bobry | US 6,229,565 |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J Henn whose telephone number is (703) 305-8327. The examiner can normally be reached on M-F 7:30 AM - 5:00 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJH
2/26/2004



NGOC-YEN VU
PRIMARY EXAMINER